

# sheet 3

```

③ #include <iostream>
using namespace std;
void main()
{
    int a[5][3];
    for (int i=0; i<5; i++) {
        for (int j=0; j<3; j++)
            cin >> a[i][j];
    }
    int sum = 0;
    float avg;
    for (int i=0; i<5; i++) {
        for (int j=0; j<3; j++)
            sum += a[i][j];
    }
    avg = sum / (5*3);
    cout << "average = " << avg;
}

```

② // برنامج يجمع 2 array في مصفوفة

```

#include <iostream>
using namespace std;
void main()
{
    int x[2][3], y[3][3], z[2][3];
    for (int i=0; i<2; i++) {
        for (int j=0; j<3; j++)
            cin >> x[i][j];
    }
    for (int i=0; i<3; i++) {
        for (int j=0; j<3; j++)
            cin >> y[i][j];
    }
    for (int i=0; i<2; i++) {
        for (int j=0; j<3; j++)

```

$$\begin{matrix} & K & J \\ \begin{matrix} i \\ \downarrow \end{matrix} & \begin{bmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \end{bmatrix}_{2 \times 3} & \begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 2 & 0 \end{bmatrix}_{3 \times 3} \\ & & = \begin{bmatrix} 1 & 0 & 1 \\ - & - & - \end{bmatrix}_{2 \times 3}
 \end{matrix}$$

```

for (int i=0; i<2; i++) {
    for (int j=0; j<3; j++)
        z[i][j] = 0;
}

```



```
for (int k=0; k<3; k++)
```

```
z[l][j] += x[l][k] * y[k][j];
```

```
}
```

```
for (int l=0; l<2; l++) {
```

```
for (int j=0; j<3; j++)
```

```
cout << z[l][j];
```

```
}
```

```
z[l][j]
```

```
#
```

④

```
#include <iostream>
```

```
using namespace std;
```

```
void main() {
```

```
char weekdays[7][10] = {"saturday", "sunday", "monday",  
-----};
```

```
int sales[7];
```

```
char Personname[30];
```

```
cout << "enter person name:";
```

```
cin.getline(Personname, 30);
```

```
for (int i=0; i<7; i++)
```

```
cin >> sales[i];
```

```
total += sales[i];
```

```
}  
int max = sales[0];
```

```
for (int i=0; i<7; i++) {
```

```
if (max < sales[i]) {
```

```
max = sales[i]
```

```
indexday = i;
```

```
} }
```

```
cout << "Person Name" << Personname << endl;
```

```
cout << "Total sales =" << total << endl;
```

```
cout << "Max sales =" << max << endl;
```

```
cout << "day of Max. sales =" << weekdays  
[indexday];
```

```
}
```